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LAKE CARRIERS' ASSOCIATION.

To consider and take action upon all general questions relating to the navigation and carrying business of the Great Lakes, maintain necessary shipping offices and in general to protect the common interests of Lake Carriers, and improve the character of the service rendered to the public.

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CONSTRUCT THE NICARAGUA CANAL.

Lyman E. Cooley, the well known civil engineer, who spent two months of last winter on the route of the proposed Nicaragua canal, in an interview says:

"As a bluff, if nothing more, the Nicaragua canal in operation to-day would be worth $100,000,000 to this government. Completed, it could perpetually say to all nations that our fleets, in a moment of necessity, could command the Atlantic and Pacific oceans, as no other fleets in the world would be able to do. In a race for Manila, we starting at New York and Spain at Cadiz, we, with the Nicaragua canal, could reach the Phlllipines before any fleet passing through the Suez canal could do so."

Mr. Cooley has studied the journey of the battleship Oregon around South America with extraordinary interest, since, if the Nicaragua canal had been completed, the Oregon might have been with Sampson weeks ago, or, in any emergency, any part of our navy could be dispatched to the Pacific coast, with the saving of thousands of miles of journey.

"Suppose at the least," said Mr. Cooley, "it costs $54,000,000 to construct this canal, or at the most $133,000,000, what would that amount to in view of the fact that at the present moment every city on the Pacific coast could be destroyed by a hostile fleet before any battleship of ours could even round Cape Horn? When we could reach the ruins of San Francisco the enemy would be at Hawaii, and when we were there they would be at Manila or safely at home. Leaving aside all question of the value to us of the canal as a powerful agency for developing our commerce, look at its construction from a war point of view.

"The Atlantic coast will always be the concentration point for the cream of our navy. New York City is 14,000 miles from San Francisco without the Nicaragua canal. That is by way of the Straits of Magellan, steam vessels leaving New York are over 13,000 miles from San Francisco, and sailing vessels, by way of Cape Horn, 15,600 miles away. The canal would shorten one route 8,267 miles and the other 10,754 miles. A man-of-war sailing ten knots an hour, or 240 miles a day, would save in the one instance forty-four days, and in the other thirty-four days' time. In other words, with the Oregon at Barbadoes, sixty-two days were occupied by her in reaching that point from San Francisco by way of Cape Horn. With the Nicaragua canal complete, forty-four days' time would have been saved over one existing route and thirty-four days' time over the other. The journey from San Francisco to New York could be made in eighteen days by a slow vessel, or ten or twelve days by a swift one. Would not this be of value to the government, when so much depends on the rapidity with which our vessels must be moved from point to point? Possessing the Nicaragua canal, we could prevent any navy in the world from rounding the Horn for the purpose of attacking us on the west."

Mr. Cooley also said that the charges through the canal would be less than the wages paid the men on the vessel and the coal consumed in a trip around Cape Horn.

In conclusion Mr. Cooley said: "We could create a naval station at Lake Nicaragua second to none in the world, and from which our vessels could pass for the protection of either of our coasts with a rapidity unequaled. The Spanish war and the journey of the Oregon will awaken the general public to the necessity of having the canal as nothing else could have done. Once built, the canal, from a strategic or a commercial point of view, means that our flag, with our shipping, will enter every port in the world, and we will be the maritime power of the twentieth century."

SUN'S AMPLITUDES.

The following approximate amplitudes of the Sun's rising will be given each week in this column during the season of navigation. A second bearing may be taken by compass at sunset by reversing the east bearings given for the nearest latitude, as the change in declination for a few hours makes but a slight difference in the true bearing of the Sun's setting:

LAKE ERIE AND S. END LAKE MICHIGAN, LAT. 42° N.

Sunrise.	Bearing.	Bearing.
June 2	E. 31° N.	N. E. by E. ¼ E.
June 9	E. 32° N.	N. E. by E. ⅛ E.

LAKE ONTARIO, S. END HURON AND CENTRAL PORTION LAKE MICHIGAN, LAT. 44° N.

Sunrise.	Bearing.	Bearing.
June 2	E. 32° N.	N. E. by E. ⅛ E.
June 9	E. 33° N.	N. E. by E.

N. END LAKES HURON AND MICHIGAN, LAT. 46° N.

Sunrise.	Bearing.	Bearing.
June 2	E. 33° N.	N. E. by E.
June 9	E. 34° N.	N. E. by E.

LAKE SUPERIOR, LAT. 48° N.

Sunrise.	Bearing.	Bearing.
June 2	E. 34° N.	N. E. by E.
June 9	E. 36° N.	N. E. ⅞ E.

With a compass correct magnetic, the difference between the observed and true bearing or amplitude will be the variation for the locality. Should there be any deviation on the course the vessel is heading at the time of taking the bearing, the difference between the observed and the true amplitude after the variation is applied, will be the amount of deviation on that course. If the correct magnetic bearing is to the right of the compass bearing, the deviation is easterly, if to the left, the deviation is westerly.

LIBEL DISMISSED.

Judge Ricks, of the United States District Court, handed down his opinion in the libel of review of Ida Sanderson and Grace and Nelle Garwood against the steamer City of Toledo. Plaintiffs were injured in the collision of August 24, 1895, between the steamer and the schooner Madeline T. Downing, towed by the tug Frank S. Butler. They libeled the three boats for damage claims. In the case against the steamer the court found no proof of fault against her and motion for rehearing was denied. Later, in the limited liability suits, some of the witnesses in the steamer case were heard, with additional testimony, and the court found in favor of the boats. Last February libel of review was filed against the steamer and its owners, the principal allegation being that the court was imposed upon by fradulent testimony.

Judge Ricks quotes from Judge Story in favor of limiting review to cases where the decree was fraud, where new facts change the entire merits, or where the principles of equity and justice require interference to prevent manifest wrong. He then holds that the petitioners could have appealed from two decrees; that in one case witnesses were examined by counsel of greater experience in admiralty practice; that the testimony is capable of quite different construction from that put upon it by counsel in the libel of review; that it is not true that the two judgments are in absolute conflict; that counsel had full opportunity to present all evidence available; and that there is no pretext of any newly-discovered testimony, the only claim being that the court reached different conclusions from the same testimony. He finds that the wholesale charge of perjury and bad faith is not sustained by the record; that the cases have been before the court in almost every phase and term. He sustains the exceptions and dismisses the libel.

SHOAL WATER AT THE "SOO."

On a recent downbound trip from Lake Superior with ore the steamer Kaliyuga and consort Fontana of Cleveland found considerable difficulty in getting through the American channel, just above the St. Mary's Falls canal. As this channel is one of the most important on the entire chain of lakes, Capt. A. R. Robinson of the Kaliyuga was asked to make a statement of the difficulty in order that the matter might be taken up with Col. G. J. Lydecker, the United States engineer in charge. Capt. Robinson's report was in substance as follows: "On April 28, while passing the lightship at the middle shoal above the American canal, and while on the canal ranges, we rubbed the bottom hard. Our consort, the Fontana, also rubbed bottom. We were drawing seventeen feet three inches. The Fontana was drawing sixteen feet nine inches. Until the bottom is cleaned out at this point we will be compelled to take the Canadian lock, as it is not safe for boats drawing over seventeen feet of water to go down the American side. Several vessels have stuck by this point this season. I hope some steps will be taken to remove this obstruction as soon as possible as we were compelled to take the Canada side last season on account of the miter sill at the guard lock, and now we have this season an obstruction even more dangerous for should we fetch up our consort would very probably run into us, as we tow with a very short line in places of this kind in order to keep the line from chafing bottom."

This statement was forwarded by Capt. George P. McKay, chairman of the Committee on Aids to Navigation of the Lake Carriers' Association to Col. Lydecker, Corps of Engineers, U. S. A., who answered as follows: "Your note regarding the present channel of west approach to the American Sault canal, stating that the same is not safe for vessels drawing over seventeen feet, and suggesting that the shoal portions be removed, is at hand. This channel was only improved to a depth of seventeen feet at mean stage of water, and for this reason vessels loaded to that depth found bottom during the low stage that has prevailed this spring. It cannot be deepened materially without extensive dredging, but it is expected that 300 feet in width of the new deep water channel, on which work is in progress, will be marked and open to navigation by the middle of next month. In the meantime the stage of water is steadily rising, and the present condition of the old channel is slightly better than it was in the latter part of April when the accident to which you refer occurred. The water opposite the lightboat and red buoy is a little better fifty feet south of the range than immediately on it."

JAPAN is having built 11 war vessels, all of which will be ready for service by 1900. Three battleships, three first-class armored cruisers and one second-class cruiser are building in English yards, one first-class cruiser in France and one in Germany, and two second-class cruisers in the United States. The aggregate tonnage of these vessels is 107,500 tons.

NEWS AROUND THE LAKES.

BUFFALO.

Special Correspondence to The Marine Record.

Capt. L. A. Campau qualified this week as master of the steamer Gazelle, of the Crystal Beach Excursion Line.

The Eurydice, the property of Sylvester Bros., of Toronto, has been sold to Campbell & Rosenecke, of this city and the price realized for the steamer is said to be $6,000. It is understood that the Eurydice will run as an excursion boat between Buffalo and Chippewa.

Looking at the daily list of entries and clearances it would seem as if the lake trade was brisker than ever, There is plenty moving, too, but freights are low and even the best charters leave little or nothing for the vessel, yet they are all pegging away at it.

A. B. Wollaber, of the local weather office, assistant to Forecaster Cuthbertson, has been transferred temporarily to the Trans-Mississippi Exposition at Omaha, Neb. His duty will be to chart the weather maps for the exposition. Morton Brown succeeds him in the Buffalo office.

Capt. M. M. Drake of the Lackawanna Line and G. W. Maytham, for ten years secretary and treasurer of the Maytham Tug Line, and manager of the Republic Steamship Company, have formed a partnership for a general insurance and vessel brokerage business, with offices at No. 1 Main street. Their business will cover both lake and canal assignments.

The tug Gorman, which was sunk by the steamer City of Buffalo, has been raised. She is not much injured. The local steamboat inspectors have taken up the case of the collision. The crew of the tug claim that the boat was run over by the City of Buffalo, and the appearance of the wreck carries out their declaration, for the tug shows that the steamer struck her straight aft.

Capt. Russell Glover, U. S. R. M., who was assigned by the department to enquire into the cause of the sinking of a part of the Gresham, at Ogdensburg, has reported that it was not due to the carelessness of any of the officers, the vessel being at that time in the hands of the contractor, who was solely responsible for the mishap. The work of raising the sunken part is being pushed as rapidly as possible, and it is expected that it will be accomplished this week.

A lumberman who has had thirty years' experience in the business, said, this week, regarding the Lumber Carriers' Association and its rates: "There is no disposition on the part of lumber dealers in the Buffalo market to reduce lake freight rates from those now prevalent. They see no reason why carriers should bring their lumber at a loss, and I, for one, am satisfied that the rates now in vogue are as low as the present conditions of the market will warrant. Considerable lumber has been purchased in the West by dealers, but they will take their own time in bringing it forward, as there is no pressing need of the lumber at this time.

The steamer Brazil, which has been in dry-dock three weeks, being converted into a general cargo carrier for the Lackawanna Line, comes out this week. She has received new decks, gangways, and considerable bottom work, the amount of repairs aggregating $10,000.

The steamer Northwest, of the Northern Steamship Company, will make a special trip to Chicago and Milwaukee previous to the regular opening of the passenger season. She will leave Buffalo Sunday, June 5, and Cleveland the following day at 9:15 a. m. The chief object of the trip is to show the people of Chicago and Milwaukee what kind of boats the company runs in their exclusively passenger line service.

The Navy Department has purchased W. J. Connor's yacht, Enquirer. This handsome, speedy craft, built by the Union Dry Dock Co. here was quietly taken to the coast just as if her owner was intending to take a cruise. After arriving at New York she was turned over to the department. The boarding officers little steamer Calumet from Chicago, and the revenue cutter torpedo boat Gresham, as well as a Cleveland owned yacht, were heralded far and wide as destined for the mosquito fleet, and it's a wonder the Dominion authorities assisted and let them go through the St. Lawrence canals. With the Buffalo yacht the affair was managed in a much different and more shipshape manner.

DETROIT.

Special Correspondence to The Marine Record.

Thacher & Shirley, contractors of Toledo will come here and lay in Rouge river, near Detroit, a 72-inch water pipe. It will be laid in a trench 38 feet deep.

Decoration day was widely observed in shipping circles here. Among other large employers of skilled and unskilled labor the Detroit Dry Dock Co. stopped work for the day.

A Port Huron landmark has been called away this week in the person of Dennis Lynn, who had been connected with the vessel business for nearly half a century.

General Manager Carter of the Detroit & Cleveland Navigation Co. says that there is a decided dropping off in the freight receipts of the company and he ascribes it to the depressing effect of the war on business.

Lumber shipments are not as brisk as it was expected they would be at about this season, and some of the members of the Lumber Carrier's Association believe that if vessels would hold off chartering for say thirty days, cargoes enough would be found for all vessels engaged in the lower lake lumber trade. There is an indication that shippers would like to get below the tariff schedule rates of freight arranged by the vessel owners, but the latter so far as can be learned are acting honorably toward each other and rebates don't go.

Capt. James Reid, wrecking master, released the steamer Outhwaite and her consort, Barr, and they are now on their way to this port for survey and repairs. Credit is due Capt. Reid for the speedy and successful floating of these two boats, especially as an expedition sent by the underwriters and working under the direction of their chief surveyor had given up the job. There is a good deal of the "stick to it, Eli," about Capt Reid, and he usually fetches what he goes after. This short job it is reported will cost the underwriters about $15,000.

John H. Galwey, formerly supervising inspector of steam vessels for the Eighth district, stationed at this port, has been appointed inspector of boilers for the district. The position pays a salary of $1,800 a year. Mr. Galwey at the civil service examination passed at the head of the list, with a percentage of 96. He is well known as a lake engineer, and has proved himself to be an excellent official while in the government service. This appointment is an indication of how civil service rules are being administered, as Mr. Galwey is a consistent democrat, but evidently merit, not politics, counts.

Vesselmen and shipbuilders are discussing the possibility that Great Britain may consent to the building of warships on the Great Lakes and give lake builders a chance at part of the $56,000,000 naval appropriation. One man thinks vessels can be built here more cheaply than on the coast because of the proximity to the sources of ore and timber. But general-manager Alexander McVittie, of the Detroit Dry Dock Co., is quoted as saying: "Just now we can build ships more cheaply than the Atlantic yards, because of the cheapness of labor which would go up as soon as work became plentiful. My impression is that the presence of ore would not help us much. It has to be shipped to Pittsburg to be made into shipbuilding material, and it can be sent on to the Atlantic as easily and as cheaply as back here. We have one decided advantage over the Atlantic builders in that our plants are more modern than those of the coast. Those are old and have old-fashioned machinery, while the lake plants are new. We could not, of course, build large vessels, for there is no way to get them to the ocean, but we could turn out torpedo boast, despatch boats and destroyers with any shipyards in the world."

CHICAGO.

Special Correspondence to The Marine Record.

There is no change in the grain freight rates this week.

James Galvin, of the Mills Dry Dock Co., Buffalo, is spending a few days in Chicago.

J. J. Rardon & Co. chartered the steamer A. G. Lindsay for corn to Collingwood at 1⅛ cents.

The small steamer Bradwell, built at Manitowoc by Burger & Burger, arrived here from that port on Sunday.

Capt. John Prindiville chartered the steamer Oscar T. Flint for corn to Port Huron at 1 cent, the steamer G. G. Hadley for wheat to Buffalo at 1⅜ cents.

The steamer State of Ohio, late of the Cleveland and Buffalo Line, has been chartered to enter the new O'Connor Line between Chicago and St. Joseph. She will berth near State street bridge.

In the small floating dry dock the tug A. Miller was on for bottom calking, the tug William Dickinson for a new 9-foot Sheriffs wheel, the schooner Annie Thorne is on the dock for recalking all over.

Capt. Sam Neff has purchased from the Hamilton & Merryman Co., at Marinette, the schooner Butcher Boy. The price paid for her is said to have been $4,000. The same company has sold the schooner C. J. Magill to Capt. Frederick B. Lovell.

Decoration Day was never more generally observed in marine circles than it was this week. Nothing whatever was done in chartering, and by noon on Monday offices were generally deserted. The display of bunting on shipping in the river was very general.

The barge F. L. Danforth, formerly one of the finest schooners sailing out of this port, arrived here on Monday with 623 cords of slabs from Little Crescent, Georgian Bay. The Danforth is now the consort of the steamer Erin, which brought a cargo of lumber from the same port.

The Independent Tug Line's tug Welcome went into commission on Tuesday. She has had her engines compounded and will now make a good, powerful tug for outside work. The compounding of her engines has increased her power to about the same as the line's newly arrived tug Prodigy.

At the yards of the Chicago Ship Building Co. the steamer Ira H. Owen docked for repairs to stern bearing and fastening propeller wheel, the steamer City of Naples for a new blade to wheel, the barge Maida for repairs to damage caused by collision with the barge Australia in the Sault Ste. Marie river.

The Michigan fruit line steamer Bon Ami, Capt. Wm. Turbell, is running between Saugatuck and Chicago. She leaves Chicago on Tuesdays, Thursdays and Saturdays at 8 p. m. The line's steamers McVea and Saugatuck will be put in commission as soon as the fruit season opens, when there will be daily arrivals from and departures to Saugatuck.

The passenger and freight steamer Mabel Bradshaw arrived here Monday morning, May 30, from Montague and Whitehall on her first trip this season. She will leave the dock of the Graham & Morton Transportation Co. on Mondays, Wednesdays and Fridays at 6:50 p m. for Montague and Whitehall. Capt. William Armstrong is in charge, Lewis Adams chief engineer.

The Goodrich Transportation Co.'s new steamer Georgia will arrive here Thursday, June 2, and will make her initial trip from this port on Saturday, June 4. She will run between Chicago and Manistique, stopping at West Shore and Green Bay ports on the way. She will leave Chicago weekly on Saturdays at 8 p. m. Capt. E. Carns is in command; Joseph Webber, chief engineer; J. W. Keith, purser; W. Reardon, steward.

Capt. Townsend has been transferred from the river and harbor work of the east shore of Lake Michigan, with office at Grand Rapids, to the Rock Island district, vice Colonel King, recently deceased. Owing to the war no regular assignment to the Rock Island territory, which includes important work on the Mississippi and other rivers, could be made. The Grand Rapids office has been abolished and the work added to the duties and responsibilities of Colonel Lydecker, Corps of Engineers, U. S. A.

The Goodrich Transportation Co.'s twin screw steel steamer Virginia will commence running daily excursions from Chicago to Milwaukee and return on Sunday, June 19. The company's steamer City of Racine will precede the Virginia and will commence running daily excursions Sunday next, June 5, leaving the dock at 9 a. m. daily. Saturday, June 4, the steamer Iowa will be put on the route between Chicago, Grand Haven and Muskegon in connection with steamer Atlanta. All of the company's steamers will commence to run on their summer season routes on Saturday, June 4.

BENTON HARBOR.

Special Correspondence to The Marine Record.

E. W. Heath, shipbuilder, is building a fine looking tug for the Milwaukee Tug Boat Line. Her dimensions are: 98 feet long over all, 22 feet 3 inches beam, 12 feet 4 inches molded depth, engine triple expansion with cylinders 14, 22½, 36 x 30 inch stroke, building by the Sheriffs Manufacturing Co., Milwaukee, boiler, Scotch type, with the late Conrad Starkey's improvements, dimensions 10½x12 feet, to be allowed 185 pounds steam, building by the Manitowoc Steam Boiler Works. The new tug is being very strongly built of the very best materials obtainable. Her frames are of 4 inch flitch molded, 10 inches on the seat, 9 inches on the bilge, 7 inches on the topsides, inside ceiling from lower turn of bilge to topside 4 inches thick, edge bolted and through bolted and forelocked on the inside, her outside planking sawed and planed 3¼ inches thick. All her deck beams around the boiler, also the carlings and engine house will be of steel. She will have a Sheriffs wheel 9 feet in diameter.

Mr. Heath has contracted with Chicago parties to build a gasoline cruising launch 47 feet over all, 9 feet 8 inches beam, 4 feet deep. The joiner work to be of mahogany.

CLEVELAND.

Special Correspondence to The Marine Record.

Capt. J. G. Keith, of Chicago, and Capt. Alex. McDougall, manager of the American Steel Barge Co., W. Superior, Wis., were among the visitors at this port on Wednesday.

The small steamer Skater has begun her regular trips between this port and Ashtabula. It is expected that the patronage will be better this season than it was last.

Capt. C. B. Galton, at present master of the steamer Lagonda, will sail the new Mitchell steamer Hendrick S. Holden, now building at the yards of the Globe Iron Works Co.

The Cleveland Yacht Club had what they call a squadron sail on Monday, most of the local yachts showing their canvas. After an enjoyable spin, dinner was served at the club house.

The little steamer Adventure was sold on Tuesday by Capt. C. E. Benham for the mortgagees. She was bid in by Fred Groch of Sandusky at $3,000, who was one of her original owners.

The sidewheel steamer Flora will be operated between Cleveland and Port Stanley this season by the Detroit and Lake Erie Railway Co. She has been put in first-class order and will start June 2.

The C. & B. Line side-wheel steamer, State of Ohio, left here this week for Chicago, having been chartered for the season; the City of the Straits has taken her place until the City of Erie is ready.

The steam yacht Wapiti, owned by Isaac Bearinger, of Saginaw, coaled at this port on Saturday. She is said to have been purchased by the United States government, and to be now on her way to the coast.

Memorial day was religiously observed at this port on Monday last, and while a few vessels worked cargoing the majority lay idle, business at the vessel owners and offices was suspended for the day, and no cha[illegible] done.

The steamer Cadillac, which struck at Vidal Shoal, river, docked at the Lorain dry dock of the Cleveland Sh[illegible]

Building Co. She had eleven damaged plates. Mr. Joseph R. Oldham surveyed the damage for her owners the Cleveland-Cliff's Iron Co.

Capt. R. J. Lyons, of the new steel steamer, Superior City, now on her maiden trip, shipped William Pardo, of Cleveland, first mate; Andrew Haas, of Bay City, second mate, and Engineer Swartz, who was in the Empire City last season, chief engineer.

A letter received by Capt. Brown, manager of the Cleveland Dry Dock Co. from Detroit, states that Mr. A. A. Parker, who suffered a stroke of paralysis, is improving, and it is thought will fully recover. His many friends on the lakes hope that his recovery will be speedy and permanent.

One of the big tows of the week carried from Ashland 14,573 net tons of ore. The vessels are the steamer Caledonia and steel consorts Amazon and Polynesia, owned by James Corrigan. The Caledonia usually tows only one barge, but had the two this last trip on account of the stranding accident to the steamer Bulgaria on Lake Superior.

The naval reserves now have some hopes of being called to the front, that is, they may get a chance to ship on some of the mosquito fleet and learn to drill in coast defense tactics. They expect to go and keep together and not to mix with the common, ordinary flat-footed swabs, rope-haulers, tar-boilers or Johnny Haultauts. Oh, no!

Mr. Charles B. Calder, superintendent of the Detroit Dry Dock Engine Works, visited this port on Tuesday on business for his firm. Mr. Calder has a host of friends in vessel owning circles, and the introduction of the Howden hot draft system is due in a great measure to Mr. Calder's energy and pleasant influential acquaintance.

Complaint is heard of floating or half submerged logs in the river, and it is suggested that the harbormaster be given authority to clear away these minor obstructions. It has been the custom to tow these logs, etc., out to the lake and then cast them adrift, but perhaps it would be better to haul them ashore to a point where they are not likely to be disturbed.

The small U. S. engineer survey steamer, Visitor, in charge of Assistant Engineer Blunt, of this district, has been engaged this week taking soundings and making surveys on the new work carried on at the breakwater. Engineer Blunt has been engaged for the past season or two on Toledo and other western Ohio river and harbor works, and is a skilled energetic officer.

Harry C. Doville, eldest son of Capt. "Joe" Doville, was married on Wednesday to Miss Madge DeLano of this city. Harry is the right hand man in the office of C. E. Benham, and his many friends wish him much joy in this his latest transaction in chartering a life long convoy. Harry is also captain's clerk of the American Association of Masters and Pilots of Steam Vessels, Harbor 42.

FLOTSAM, JETSAM AND LAGAN.

The Boilermaker is the name of an illustrated monthly publication issued by J. T. Ryerson & Co., 18 Milwaukee avenue, Chicago, Ill.

"Light Draught Steamboats and their Driving Machinery" is the title of a pamphlet issued by the Marine Iron Works, Chicago, Ill.

The Fair department store at Escanaba was destroyed by fire on Monday night; loss about $55,000, covered by insurance $40,000 of that amount.

The tug Agnes Arnold burned at Chambers Island on Monday. The loss is estimated at $3,500; insurance $2,000. The tug was owned by Capt. M. J. Arnold, Marinette, Wis.

During May there were 202 arrivals and 200 clearances at the port of Ashtabula. There were 310,039 tons of ore received and 133,500 tons of coal and 994 tons of merchandise shipped.

The steamer, A. J. Lindsay, after being stranded near Collingwood, Georgian Bay for several days, was released after lightering her South Chicago grain cargo. A new propellor and some minor repairs will be given her at Collingwood.

A special from Ogdensburg states that John S. Churchill, of the United States Engineer Corps, has just completed a tour of inspection of the work of removing Blind Bay and Dark Island shoals. There is now 18 feet over these places at low stage of water.

Deckhands on the Ohio River are now receiving $50 a month and their board. Firemen get from $40 to $45. Deckhands in the pools are paid $40 and $45 a month, as the crews employed are small and good men are required to do the work.

The channel has been finished at the eastern end of Portage Lake, and the dredges are now working at the west end. The work aggregates 1,000 yards daily, and the whole improvement will be finished July 1. The shallowest place in the canal now has a depth of thirteen feet.

The steamer Queen City completed loading a large cargo of wheat at Duluth last week at the Globe elevator system. The cargo was loaded in remarkably quick time, as 185,000 bushels is said to have been loaded in three hours, or a little better than 1,000 bushels a minute.

[illegible] feet of embankment burst out on the North side [illegible] canal, one mile west of Brockport early on [illegible]day morning last. The waters flooded the low wheat-[illegible]lands for several miles and did considerable damage to the young crops. A big gang of men was at once put to work repairing the break.

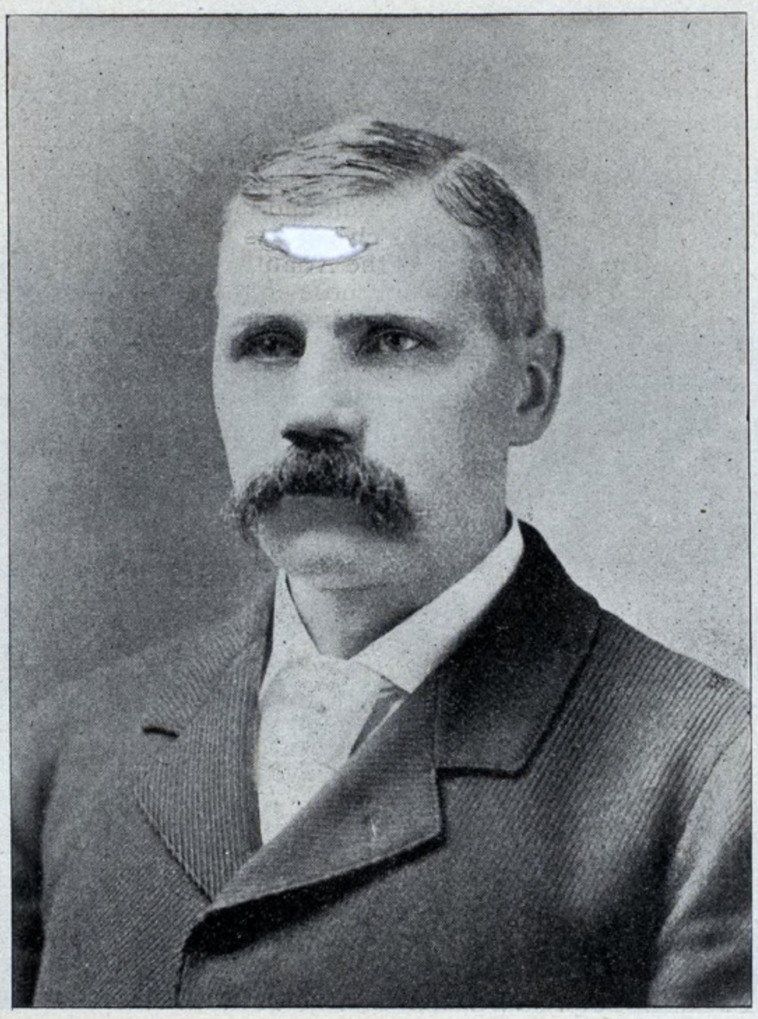
One hundred and eleven vessels arrived at Milwaukee during the week ending Monday last, and with one exception each carried a cargo. Of these 90 were steamers and 21 schooners. Both Tuseday and Sunday mornings 19 steamers arrived, the largest number of that class to arrive daily since navigation opened.

Capt. Albert Hall, of the little schooner Lena Hall, reports at Ludington that he lost his only sailor overboard 20 miles northeast of Waukegan Friday afternoon. Capt. Hall made an unsuccessful effort to save the drowning man, and then brought his schooner to Whitehall alone. The lost sailor was named William Young.

With marine insurance losses aggregating nearly $300,000 in April, it is found that about $75,000 will cover the May losses. Nearly two-thirds of the damage done can be charged up to strandings. The total estimate of loss from this cause is $45,550. Collisions brought up a total of $17,650, fires of $7,400, and other losses were about $5,000.

The Peters Lumber & Shingle Co. are now at work transferring 50,000,000 feet of lumber and 40,000,000 shingles from Manistee to their new yards at Benton Harbor. Two barges, Ida E. and Arcadia, and four schooners, G. W. Naughton, W. H. Dunham, Lucy Simpson and A. W. Luckey, make a round trip each 36 hours. One hundred and fifty men are working night and day and seven days in the week.

A handsome book has just been issued from the press entitled "Review and Prospects of the Toledo Yachting Association." On the frontispiece appears the club badge,



THE LATE THOMAS F. DOWD,
National Secretary M. E. B. A. Born 1853. Died May 19, 1898.
Obituary in the Marine Record, May 26.

in colors. The book is the work of Secretary Torgler. It embraces all the events of the association that will occur during the season, and will prove a very convenient aid to the members. It contains a full list of the members of the association.

O, Dewey was the morning
Upon the first of May;
And Dewy was the Admiral
Down in Manila bay;
And Dewey were the Regent's eyes,
Them orbs of royal blue;
And Dewey feel discouraged?
I Dew not think we dew.

—Kansas City Journal.

The many friends of Capt. McKenzie of the Duluth life saving station will be pained to learn that he is meeting with little hope in treating the cancer on his face. The cancer started on the lower lip. Operations were performed by skillful surgeons and everything was done that medical skill could suggest, but the cancer continued its insidious course till now it has extended to the jaw and it is beyond any reasonable hope, it is said, that a permanent cure can be affected.

Andrew Gilbranson, a sailor on the schooner Goshawk, libeled the vessel at Duluth a day or two ago to collect wages to the amount of $11.50. The sailor wished to quit the vessel, claiming that he was sick. The master objected to paying the sailor off as he claimed Gilbranson had signed articles for a round trip. There was a hearing of the case before United States Court Commissioner Pressnell, who held that the papers in this particular case were not a contract and therefore not binding on Gilbranson to complete the voyage back to Lake Erie.

During the month of May there was reported at the Buffalo custom house 31,479,852 bushels of grain as against 23,944,600 bushels for May of 1897. An increase is shown over April receipts of 3,370,628. Total receipts of the month of leading articles of lake freight were as follows: Wheat, 11,779,473 bushels; corn, 9,811,312; oats, 6,778,064; barley, 413,720; rye, 1,069,500; flour, 1,567,783 barrels; feed, 206-, 108 sacks; lumber, 21,294,000 feet; shingles, 21,146,000; iron ore, 74,758 tons; copper, 18,387 tons. Shipments also show an increase over last year, according to the following figures: Coal, 1897, 169,450 tons; 1898, 229,812 tons; salt, 1897, 89,502; 1898, 137,674; cement, 1897, 111,579; 1898, 111,706 packages; sugar, 1897, 160,871; 1898, 188,088 barrels.

The Navy Department has formally notified the Bethlehem Iron Company of the acceptance of the last group of armor for the battleships "Kearsage" and "Kentucky," and has directed its shipment to Newport News. This action has been taken as the result of the trial on the 14th inst. of an 18-inch plate representing the group designed for the 13-inch turrets of the "Kentucky." In view of the desire of the government that these vessels shall be ready for service as soon as possible, it was important that this test plate should come up to the naval requirements, and unusual care was taken in the manufacture of the group. The test plate was backed by 36 inches of oak and was attacked by two projectiles, the first a Holtzer and the second a Carpenter armor-piercing shell, each of 10-inch caliber. The Holtzer shell was fired with an initial velocity of 1538 foot seconds and the Carpenter shell was given a velocity of 1945 foot seconds. Both projectiles struck the plate squarely, the first penetrating 10 inches and the second 11 inches, but no crack or other injury to the plate resulted. The group is pronounced one of the best ever presented for test.

TREASURY DECISIONS.

ADMEASUREMENT OF VESSELS.

Compartments with two berths may be certified for three seamen on compliance with regulations.

TREASURY DEPARTMENT,
BUREAU OF NAVIGATION,
WASHINGTON, D. C., May 18, 1898.

SIR: In reply to your letter dated the 16th instant, this office has to state that a compartment having two berths may be certified for three seamen on the application of the owner, provided that the circumstances are such as to bring the case within section 1 of the act of March 2, 1895, "a."

Respectfully yours,
E. T. CHAMBERLAIN,
Commissioner of Navigation.

VESSELS FROM CANADA.

Small vessels, scows and sleds arriving in the District of Alaska from Canada must observe provisions of section 3098, Revised Statutes—scows should comply with the laws governing entry and clearance.

TREASURY DEPARTMENT, May 20, 1898.

SIR: This department is in receipt of your communication, dated the 29th ultimo, relative to certain craft plying across the boundary of the United States and British Columbia.

It appears to the department that such craft are covered by the provisions of section 3098 of the Revised Statutes and of section 3109 as amended by the act of February 17, 1898, section 4. The law may also be applied to the sleds and other vehicles you mention as passing across the line between the territory and British Columbia.

Touching the fees to which you refer, your attention is invited to section 4382 of the Revised Statutes, and to chapter 30, Regulations, 1892.

The undocumented scows you mention as being towed up the coast from British Columbia with lumber, etc., can trade only subject to the regulations applying to other vessels under similar circumstances, and to alien as well as other tonnage dues. Their tonnage must be ascertained in the usual manner; manifests of their cargo should be produced, and the vessels should be entered and cleared, and pay fees, as prescribed by law. (See "Entries of vessels," etc., Cir. Oct. 11, 1890.) Respectfully yours,

O. L. SPAULDING, Assistant Secretary.

Collector of Customs, Sitka, Alaska.

CLEARANCE OF COAL.

TREASURY DEPARTMENT, May 21, 1898.

COLLECTOR OF CUSTOMS, New York, N. Y.: For present, wire department brief statement of facts with your recommendation in each specific application before granting clearance of coal to West Indies, Bermuda, Mexico, Central America and South American ports.

O. L. SPAULDING, Assistant Secretary.

MARITIME LAW.

MARTEN V. THE NIPPON LAND AND SEA INSURANCE CO.

The plaintiff here claimed a re-insurance policy on goods per "Adonis" from Liverpool to any ports on the west coast of South America. This re-insurance policy was expressed to be subject to the same clauses and conditions as the original policy, and to pay as might be paid thereon, and the duration of the risk was thus defined: "From, and immediately after, the loading thereof on board the said ship or vessel, and so to continue and endure until the same shall be discharged and safely landed at the aforesaid port," while the original policy contained the following clause: "Including all risks whatsoever by land and water and, or inland conveyance and, or of transhipment from the place whence despatched whilst waiting shipment, and until safely delivered to consignees."

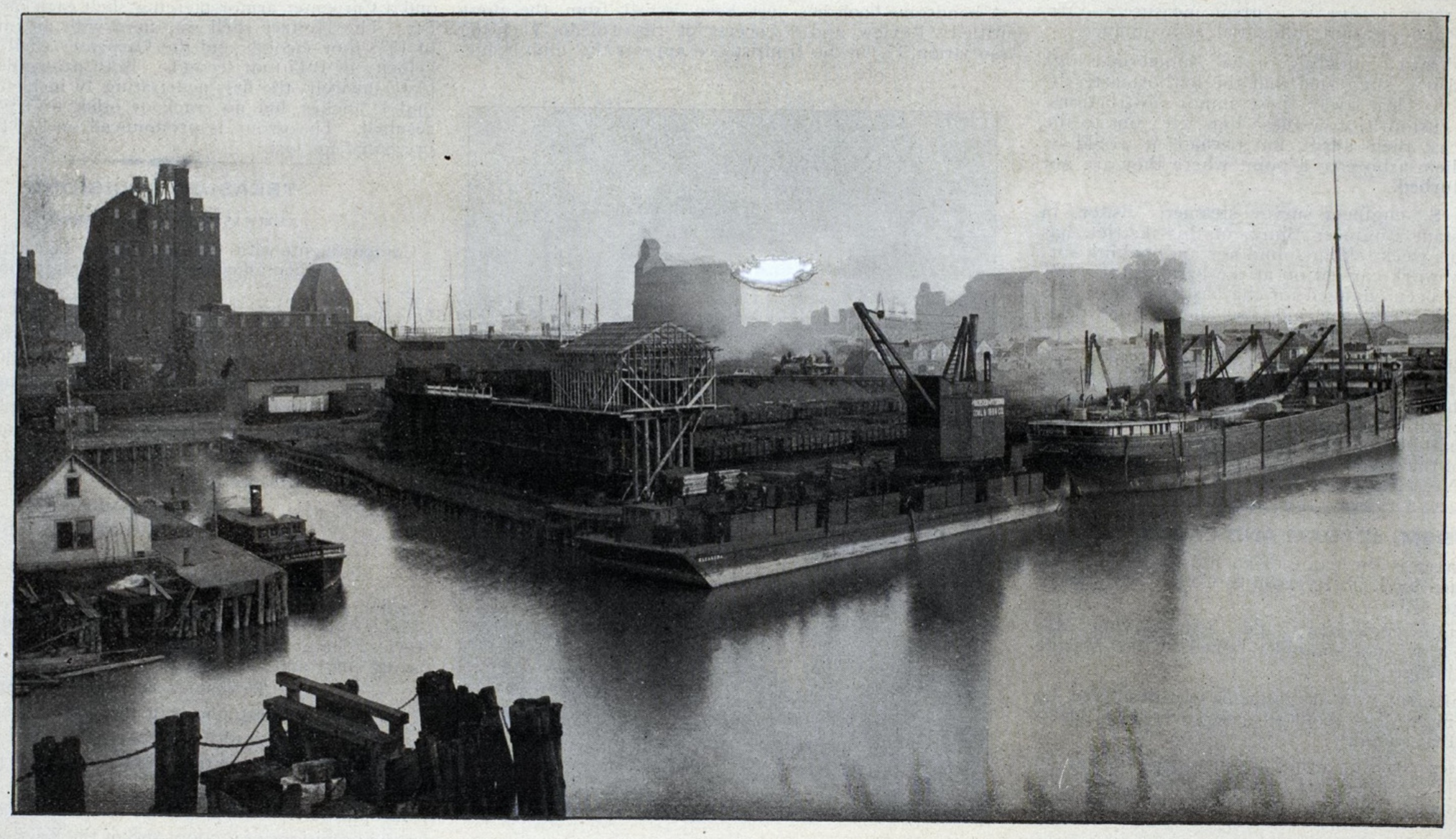
The "Adonis" sailed to Guayaquil, and discharged the goods, which, being dutiable, were placed in the customs house, and while there were totally destroyed by fire. The plaintiff paid a total loss, but the defendants objected to pay, contending that the "warehouse to warehouse" clause contained in the original policy was very unusual, and as it had not been disclosed to them at the time of effecting the re-insurance policy, could not be read into it. On this point the court was against them, holding that it was so common a clause that they ought to have known it was in the original policy. On a second point, however, that, even if the clause was incorporated, the risk had terminated at the time of the fire, they were successful; his lordship decided that as soon as the goods were in the customs house the transit was over. They were there for the purpose of keeping them for the consignees, and the customs' warehouse must be regarded as if it were the warehouse of the consignees.

THE FIELD STEAMSHIP CO. V. BARR.

This was a marine insurance case—a class of litigation in which the courts have been dealing rather largely during the past month—in which the plaintiff company, the owners of the steamship "Elmfield," sought to make the underwriters liable on a policy in the ordinary form for the expenses incurred in discharging and disposing of a cargo that had been so damaged as the result of a collision to have become worthless, and had been rejected by the cargo owners. The facts of the case were, shortly, as follows: The policy in question was a time policy "on hull and materials, machinery and boilers, valued at £10,000," and the perils insured against were, among others, "perils of the sea . . . . and all other perils, losses and misfortunes that have or shall come to the hurt, detriment or damage of the ship or any part thereof." During the currency of the policy, the "Elmfield," while carrying a cargo of cotton seed, was so damaged by a collision in the Thames that she had to be run aground to prevent her sinking. After some of the cargo had been discharged into lighters, she was towed into a dry dock for temporary repairs, and then taken to Millwall dock for the rest of the cargo to be discharged. This, however, by reason of the action of the water and mud which had got into the ship in consequence of the collision had become so rotten and offensive as to constitute a nuisance, which the sanitary authorities ordered the ship to abate. Meantime the cargo had been abandoned by the owners to the underwriters, but neither of them would pay freight or take delivery, alleging that the cargo had ceased to be cotton seed and had become worthless. The vessel was then towed to Dagenham, at the mouth of the Thames, and the putrid cotton seed removed and disposed of at a cost of 5s. per ton. The claim against the defendant and his co-underwriters, which was very heavy, had been settled, with the exception of two items, one of £287, 2s. 10d., expenses incurred in dealing with the cargo between the date of the collision and the taking of the ship to Dagenham and another of £759, 10s., the cost of discharging and disposing of the Cargo at Dagenham, for the recovery of which sums this action was brought. It was argued for the plaintiffs that these items of expenditure were recoverable as having been incurred by reason of perils which had come to the hurt, detriment or danger of the ship within the meaning of the policy, that as the cargo had not arrived as cotton seed, and the shipowners were therefore not obliged or even allowed to deliver to the cargo owners, the cost of dealing with it in the circumstances was as much a part of the loss by the perils insured against, as the cost of repairing the hole in the ship's bottom. It was also urged that as the last named repairs could not be executed without removing the cargo they were entitled to the cost of removing it, and in any event to the difference between what it would have cost to discharge cotton seed, and what it did cost to discharge the putrid mass into which it had been changed. These arguments were not accepted by the court, which held that where the insurance was upon hull, materials and machinery, the shipowner cannot recover against the underwriter unless he has been deprived of his ship, or the use of her, or physical damage has happened to her by the action of one of the perils insured against. It was not enough merely that the perils of the sea should have caused loss to him, they must have caused the loss of or damage to his ship. If this were not so the extra expenditure due to the delay of a vessel through such perils of the sea as adverse winds or storms would fall upon the underwriter. For consequential damages the underwriter, according to the cases was not responsible. If a ship was to be used again it had to be emptied, and the fact that in the ordinary way the owner, on doing so would get his freight, while in the circumstances of this case he could not, did not, in the learned judge's opinion, concern the underwriter. While it seemed to him that if the shipowner was not entitled to the cost of discharging the cargo, a fortiori, he was not entitled to the cost of disposing of it. The claim for the difference between the cost of discharging the cotton seed and the cost of discharging the rotten mass into which it was converted, was also held too remote.

CANADA-ATLANTIC TRANSIT CO., AT MILWAUKEE.

A very pleasing event which took place at Milwaukee on Saturday last was the formal opening of the new docks and warehouses of the Canada-Atlantic Transit Co., the warehouses are on South Water street, and have a river frontage near the St. Paul railroad tracks. The building is 506 feet in length, ninety-two in width, and fourteen feet high. The roof is a truss system with a gravel composition covering, fire-proof and durable. The walls are covered with corrugated iron and have heavy sliding doors on continuous rail, on the track side of the building, so that cars can be placed at any point desired. The approaches on the docks and the doors on the warehouses are so arranged as to fit the hatchways of the fleet of steel steamers now handled by the line. Mr. C. D. Howard, Milwaukee agent for the company very courteously received a number of the prominent shippers, merchants and members of the Chamber of Commerce and the opinion prevailed that the Canada-Atlantic Transit Co. had secured the finest accommodations in Milwaukee and that there was ample room to handle an immense business. The new Canada-Atlantic line is an additional lake-and-rail route from Chicago-Milwaukee to the eastern seaboard. It extends by water from Chicago to Parry Sound, Georgian Bay and thence by rail to New York, Boston, etc., by means of traffic agreement with other lines at Montreal. The fleet of steamers have each a capacity of 3,400 tons. These will make three trips a week between Chicago, Milwaukee and Parry Sound. The trip from Milwaukee to Parry Sound is to be made in forty-eight hours.



View of the Rochester & Pittsburgh Coal and Iron Co.'s Dock at Buffalo.

(From engraving used in Beeson's Marine Directory, 1898 edition, just from press. Copyrighted.)

CAPT. CHARLES GALE of Sombra, Ont., the first white child born in Chicago, ought to write his autobiography and he is still well able to do so.

COLLISION DAMAGES DIVIDED.

There was filed this week in the United States District Clerk's office at Buffalo, a decision in the case of the Livingstone. The case was argued before Judge Coxe on April 26, last, at Ithaca. The libel was filed by the Lackawanna Transportation Co., and the Delaware, Lackawanna & Western Railroad Co., against the propeller Livingstone, to recover damages for the loss of the propeller Grand Traverse and her cargo, owned respectively by the libelants,

The faults which the libel averred against the Livingstone were, first, insufficient lights; second, failure to heed the signals of the Grand Traverse; third, failure to stop and reverse, and fourth, starboarding when the vessels were only a quarter of a mile apart. The libel demanded judgment for $50,000, the value of the Grand Traverse, and for $15,000, the value of her cargo.

The owners of the Livingstone, the Michigan Navigation Co., Detroit, filed an answer denying all the allegations of negligence on the part of the Livingstone, and alleges that the Grand Traverse was at fault; that the Livingstone suffered damage in the sum of $6,850, which constitutes a just and equitable claim against the owners of the Grand Traverse.

The collision in question occurred about 5:30 in the morning of October 19, 1896, on Lake Erie, about a mile northwest of the Colchester light. The Traverse was proceeding up, and the Livingstone down the lake; the collision occurred in the open lake, and the court says: "The circumstances are almost sufficient to create a presumption of negligence on the part of both vessels. The problem cannot be satisfactorily worked out upon the hypothesis that only one vessel was negligent."

After citing a number of authorities that a vessel neglecting to follow the provisions of law in these particulars is guilty of negligence the judge says: "It is enough that the libelants have failed to show that their neglect in these particulars cannot have contributed to the disaster. The courts should be loth to make any ruling which shall encourage shiftlessness and inattention to duty in the navigation of ships. Only in the plainest cases are almost sufficient to create a possibility of saying that a vessel can violate the law and still be free from fault. The preservation of life and property depends upon the strict observance of these rules, and those entrusted with the care of ships should understand that they must be enforced with uniform and absolute certainty. When it is distinctly understood that for carelessness in this respect no excuse will be received, the discipline of our merchant marine will be improved, and collisions like this will be heard of no more. It follows that there must be a division of damages and costs and a reference to compute the amount." The counsel in the case were, Harvey D. Goulder, of Cleveland, O., and Franklin D. Locke, of Buffalo, N. Y., for libelants; F. H. Canfield, of Detroit; C. E. Kremer, of Chicago, and Harvey L. Brown, of Buffalo, N. Y., for the respondent, and John C. Shaw, of Detroit, for the intervener. As the Livingstone was fully insured against collision, the suit was a contest between the underwriters.

HARBOR MASTER AT SAND BEACH RESIGNS.

Continued poor health has compelled Captain R. M. Wagstaff to resign his position as custodian of the Sand Beach harbor of refuge. The resignation is now in the hands of Colonel Lydecker, Corps of Engineers, U. S. A. in charge of the district, and takes effect June 1. His successor must pass a civil service examination, and just how the appointment will be made has not been decided by the War Department.

Captain Wagstaff was the first and only man to fill this position. He received his appointment in October, 1882, from the Secretary of War on recommendation of Major Farquhar, then engineer in charge of the rivers and harbors of Southern Michigan. During the sixteen years of his incumbency not an owner on the lakes has lost a dollar through accident caused by orders from the harbor master. His successor will have a comparatively easy time of it, for every master on the lakes now understands the rules of the harbor and knows he will be held to them. Prior to 1883 the harbor had been left to take care of itself, with the result that disasters within its piers were of frequent occurrence. On one occasion an entire tow went on the rocks at the south end of the harbor, two vessels were total losses, and five or more lives lost. Collisions, strandings, and sinking were the result of the absence of some one in authority to enforce the rules.

For some time after the captain took the place masters, unaccustomed to being interfered with, openly violated the regulations, which were posted in conspicuous places on the piers. Complaint after complaint was made to the United States District Attorney at Detroit, and in each case nominal fines were imposed by Judge Brown. Finally the judge lost patience as the complaints continued to come, and sent notice to all owners through the newspapers that thereafter all offenders at Sand Beach would be given the full penalty of the law, which meant heavy fine or imprisonment. That ended it, and since orders have been observed.

Scene in Manitowoc Harbor, December 15th, 1897, showing a coal laden fleet.

(From engraving used in Beeson's Marine Directory, 1898 issue, just from press. Copyrighted.)

EASTERN FREIGHTS.

Messrs Funch, Edye & Co., New York, report the eastern freight market for the week as follows: The list of charters tells its tale of a shrinkage in the volume of business effected, such as we have not experienced for quite a time back. Grain charterers have been entirely removed from general competition, being confined to transactions for account of a Chicago speculator who, in order to monopolize the market for his sales of wheat, is keeping later terms of delivery beyond purchasers' limits, whilst there is unfortunately very little demand for maize in Europe; hence, shippers holding tonnage not actually provided for, are pressing on the market to recharter. Under the circumstances we cannot quote for prompt and June tonnage over 3s. 6d. for Cork f. o., and 3s. 3d. and 3s. 4½d. for larger boats to picked ports. At the present there is practically no enquiry whatever for later months' shipment, July being especially dull. Berth freights have declined apace, and a great many old engagements been relet at a very substantial decline. The advancing tendency of deal freights from the Provinces has been checked, in consequence of free offering of boats, and at the time of writing, shippers decline to make any bids for tonnage. Some time boats have been fixed to provide tonnage for routes previously covered by American tonnage, and several fixtures made for timber from the Gulf ports—owners gradually falling to this trade, although on a considerably higher level of freight than current at this time last year.

Business in sail tonnage from New York and neighboring ports has been comparatively light, as neutral vessels continue scarce. Good rates have occasionaly been paid for pressing orders, but the great uncertainty in the political outlook prevents a livelier development of business. Quite a number of charters, however, are reported for deals and lumber, and there is still a good demand for lumber, but owners are not pressing their vessels on the market. In barrel oil to Europe but little has been accomplished, while for cases to the East not a single figure is reported for this week, though rates continue exceedingly firm for this branch. Naval stores freights are considerably calmer, and we cannot quote over 3s. 3d. for rosin for small vessels from the South to Cork f. o., with 1s. 3d. extra for spirits.

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BUILD NAVAL TONNAGE AT LAKE PORTS.

Lake shipbuilders and the people of the cities of the lakes should use their influence to get the government to negotiate with England for the abrogation of that almost obselete treaty which prevents either power from building armed vessels on the Great Lakes. Thirty million dollars is to be spent for additions to the navy, and many of the war craft ordered could be built at lake shipyards, whose facilities would enable them to bid against the coast builders. But the old treaty stands as a barrier to their participation in the work, because the completed vessel would have to pass through British waters in getting to the ocean.

Another feature of the matter should appeal to the government since it has awakened to the fact that recruits for naval service cannot be picked up anywhere, and that is that with lake shipbuilders constructing and repairing warships, a lake naval reserve could be organized that would be really efficient. The construction of even small warships in the lake ports would stimulate interest in this branch of the service and educate the public in a line in which our country is soon to take second or at least third rank.

George E. Adams, former Congressman from Illinois, is watching with considerable interest the spasmodic efforts made towards bringing about a revision or abrogation of the treaty enacted between the United States and Great Britain under the conditions of which neither government shall construct or maintain on the Great Lakes war vessels.

Shipbuilders at all lake ports are no doubt also watching the outcome, as since the enactment of the treaty they have not been able to receive any of the government contracts for building armored vessels, and an abandonment of the compact would no doubt enable them to get a portion of the $30,000,000 to be expended for a new navy equipment.

When in Congress Mr. Adams took a notable stand in connection with the treaty mentioned, inasmuch as he held that it had already been made null by certain acts. Mr. Adams said:

"The United States has never abided by the treaty in question, and as a matter of fact it was only an arrangement and was never confirmed in the proper channel. I feel assured that if a frank statement were made to Great Britain it would result in the United States being able to do as is wished in the matter.

"The shipbuilders in lake ports have been barred from their share of government patronage owing to the fact that the armed vessels if constructed by them would have to pass through Welland canal and other British waters when on their way to the Atlantic seaboard."

THE thanks of the RECORD are due the Weather Bureau Department of Agriculture, Washington, D. C., for a copy of the meteorological chart of the lakes for June.

THE Ohio Naval Reserve Corps, after anxious weeks of doubt, have at last received notice that they will be given a chance to fight for their country. Word has been received from Secretary Long that every member of the reserves who can pass the examination will be accepted in the auxiliary service of the government. When the Naval Reserves were given a chance to enlist as seamen and marines on the different boats of the navy and refused to accept the offer, many persons questioned the policy of their refusal. Later events, however, have given them a standing which they did not hope to secure, and now that they are asked to give their services to the government in just the manner they desired, it is made plainly evident that they adopted a good plan in refusing to lose their identity as a body. The government has granted them their demands, and if so it can be called, it is a complete surrender on the part of the Navy Department. Not one concession is asked from the Reserves, and there is not the slightest doubt that they will now accept the offer of the Secretary of the Navy and all go together to the number of about 400, mustered in from Cleveland and Toledo.

THE death of Stephen D. Caldwell last week will cause a pang of sorrow in thousands of hearts. He was beloved by all men for his uprightness and integrity and all will acknowledge that a model man, a noble man, has been called hence. The world has profited by his sojourn here, and the world, his world, must feel the loss. Mr. Caldwell has been closely associated with transportation interests, both lake and rail during all of his business career, and he was the first president of the original Lake Carriers' Association. He managed great business interests with admirable skill and invariable success. As a man he had a host of friends because he was honest and generous and of high character. His death will be mourned sincerely by everyone who knew him.

THE Senate Committee of Commerce has had under consideration the subject of granting American registry to foreign built ships for the purpose of securing their services in carrying troops and supplies to the Philippine islands, and they eventually decided to place the matter in the hands of a sub-committee with authority to report favorably in all cases in which the war department may make request that register be granted.

LAKE FREIGHTS.

Iron ore rates remain at last week's figures, Escanaba and Lake Superior ports 40 cents and 50 cents respectively.

Coal rates, Lakes Michigan or Superior, bituminous or anthracite, 20 cents all around.

Grain from Chicago is slightly weaker, the latest quotation being 1⅛ cents on corn and 1 cent from South Chicago. Duluth wheat shipments are about over until the new crop comes in.

POSITIONS IN THE LIGHT-HOUSE SERVICE.

LIGHT-HOUSE ESTABLISHMENT,
OFFICE OF THE LIGHT-HOUSE INSPECTOR, TENTH DIST.,
BUFFALO, N. Y., May 28, 1898.

Notice is hereby given that several vacancies exist in positions under the Light-House Board in this district, which extends from Ogdensburg, N. Y., to the River Rouge, near Detroit. Mich.

Among the positions to be filled are the following, viz.:

2 masters, for service on light-vessels.

1 light-house keeper.

2 assistant light-house keepers.

Persons who wish to apply for either of the foregoing positions should obtain a copy of the proper form of application from this office, either in person or by mail, and after filling it out return it to this office. Those who have already filed applications need not do so again. Applicants need not appear in person.

Thirty days from the date of this notice all applications received will be examined, the applicants graded according to merit, and a list of those eligible for appointment sent to the Light-House Board.

FRANKLIN HANFORD,
Commander, U. S. N. Light-House Inspector, Chairman Local Civil Service Board.

THE HEAVENS FOR JUNE.

Astronomical data for June, 1898, furnished to the MARINE RECORD by the Washburn observatory:

Mercury may still be seen as a morning star the first part of the month, but the planet passes superior conjunction June 30, becoming then an evening star. Venus is still increasing in brightness and altitude as the evening star, and sets from 9:39 to 9:44 p.m. Mars is seen in the morning sky, rising from 2:20 to 1:15 a.m., somewhat north of east. Jupiter is the brilliant planet high in the northwestern sky in the evening; though by the end of the month it sets by 11:40 p.m. Saturn is low in the southeastern sky, and reaches the meridian from 11:48 to 9:46 p.m.. The sun crosses the meridian at its highest altitude June 21.

The times of sunrise and sunset for the month at Milwaukee are as follows:

	SUNRISE.	SUNSET.
June 1	4 hours, 15 minutes.	7 hours, 24 minutes.
June 11	4 " 12 "	7 " 30 "
June 21	4 " 12 "	7 " 34 "
June 30	4 " 16 "	7 " 34 "

The times of the moon's phases are:

Full moon, June 4, 8 hours, 11 minutes, a.m.
Third quarter, June 11, 12 " 4 " "
New moon, June 18, 10 " 19 " p.m.
First quarter, June 26, 10 " 54 " "

The principal fixed stars visible during the month, in the evening hours are: To the west, Regulus; near the meridian, Arcturus and Spica; to the east, Vega and Antares.

THE LAKE CAPTAIN.

The lake captain has no knowledge of the science of navigation. Never is he out of sight of land for any length of time, and he must know his route almost as river pilot knows the stream he sails. In truth, so far as following his course goes, the lake captain is a pilot rather than a seaman. His steering is by compass and the shore line; never does he watch for the sun in order to ascertain his position by an observation. He depends in a large measure upon landmarks in finding his way, and when they are hidden by fog or a snow squall he must make the best guess he can. He has always at least one port to make in a day, and sometimes two or three. In each of them there is enough routine work to keep him busy until he sails again. If he commands a freight boat he often has to shift his vessel from one dock to another, perhaps several times, in order to pick up all his cargo. No pilot meets him off a harbor to share his responsibility and steer his vessel in. He must not only keep the deck during storms and when entering and leaving port, but also during fogs and when the dense smoke from the forest fires of autumn lie on the water, for such well-traveled thoroughfares as he sails demand eternal vigilance. In harbor and at sea, the lake captain's duties are many and his hours of labor long.—From "Carrying Trade of the Great Lakes," by Allan Hendricks, in "North American Review" for June.

The Sandusky Register takes exceptions to the foregoing views, for, as editor Mack says: "It is not true that the lake captain has no knowledge of the science of navigation. Some of the lake captains are scientific navigators. Put them on board an ocean steamer or sailing vessel with a reliable chart before them and a compass and they would be as successful as most of the ocean captains are now. They understand the science of navigation and they are often obliged on the Great Lakes to apply it. There are many times when they are compelled particularly on Lakes Huron, Superior and Michigan to sail their vessels by the stars, and they would run on to the rocks and shoals if they did not understand the science of navigation, It is not true that they never watch for the sun in order to ascertain their position by observation.

It is true that they do depend largely upon landmarks and that would be perfectly proper and legitimate and the easiest way of doing because they are rarely out of sight of land in the day time but when they are they are able to apply the science of navigation and they do successfully."

NEW TONNAGE.

Official numbers assigned by the Bureau of Navigation, Treasury Department, Washington, D. C., during the week ending May 21. Steamers—City of Erie, 2,499 tons gross, 1,280 tons net, built at Wyandotte, home port Cleveland. Clinton, 124 tons gross, 63 tons net, built at Mt. Clemens, home port Detroit. Louise B., 15 tons gross, 9 tons net, Chicago. Superior City, 4,795 tons gross, 3,694 tons net, built at Lorain, O., home port Duluth. Canal boat—A. J. Hathaway, Jr., 131 tons, built at Tonawanda 1890 and hailing from Buffalo.

The Russian Government has ordered of a British firm two 38-knot torpedo boats on the model of the Turbinia and propelled with turbine motors working on four shafts, each of which carries three propellers. This is eight knots faster than the fastest torpedo-boat destroyers in the British navy.

NOTICE TO MARINERS.

ON BOARD U. S. ENGINEER STEAMER "VISITOR." }
CLEVELAND, O., June 1, 1898. }

The South Turn out around the Crib range lights in the Straight Channel, Maumee Bay, Toledo, Ohio, has been completed to its full width of 200 feet, and a depth of not less than 17 feet at mean level.

There is now a clear channel on each side of these crib lights, and boats are requested to follow the "rule of the road," whenever practicable to show their port sides to the Crib.

The outer junction with the Straight Channel is marked by black spar 13 and red spar 14, the inner junction by black spar 15 and red spar 16, and the outer edges of the turn out midway of the length by black and red spars respectively.

Dredging is in progress along the south bank of the channel inside the cribs and boats are requested to avoid interfering with the marks.

Very respectfully, WM. T. BLUNT,
U. S. Asst. Engineer.

OBITUARY.

MR. STEPHEN D. CALDWELL.

The late Mr. S. D. Caldwell, formerly manager of the Western Transit Company, the lake line of the New York Central and Hudson River Railroad Line, died at his home in Buffalo, on Thursday last, at the age of seventy years.

While Mr. Caldwell had retired from active business pursuits for the past year or two, and it was known that his health was rather impaired, yet his call hence will cause deep regret in shipping circles, for his admirable, sterling character placed him in the highest esteem of those who had the pleasure and honor of his acquaintance.

On the organization of the Lake Carriers' Association, Mr. Caldwell was elected president, being afterwards re-elected to the same honorable and important office, a position which his high character and fine executive ability peculiarly fitted him for.

Stephen D. Caldwell was born in Canajohairie on January 4, 1828. His father, the late Judge Samuel Caldwell, went to reside in Buffalo in 1830, and Mr. Caldwell's education was received in the public schools of that city.

From the first that wonderful business tact and executive ability which were so strongly felt in after years made itself apparent. Mr. Caldwell began his business training with the firm of Kimberlee, Pease & Co., whose offices were on the Main street dock. Early in the 60's Mr. Caldwell had risen to the office of manager of the Erie Railroad steamboat lines, with headquarters at Dunkirk, Pa., later removing the office to Buffalo, and continuing in the management until induced to make a visit to the heads of some of the European governments for the purpose of convincing them of the utility of the Lay torpedo.

So well did he perform the task assigned him, and so clearly exhibited his depth of resources and business acumen, that on his return his services were earnestly sought by line owners. He was soon installed as manager of the New York Central's fast freight department, which was increased so effectively that Mr. Caldwell was advanced to the management of the Western Transit Company, a position he filled with great ability until his retirement in 1897, owing to ill-health.

Thirty-five years of nearly constant executive labor had brought their natural results, and for the last two years Mr. Caldwell was a constant sufferer. For a year previous to his retirement from business, he had sought improved health in the mild climate of Southern Europe and at the famous medical resorts of the continent, but he continued to grow worse, and finally decided to throw off the cares of business entirely and seek perfect rest. Medical skill proved unavailing to arrest the progress of disease and the end causes universal regret for the close of a life marked by great force of character and an integrity unimpeachable.

The Buffalo Courier well observes that in all his business relations Stephen D. Caldwell was the soul of honor, and his advice and judgment were frequently sought by business associates.

In his business life he was brought into direct connection with prominent business men of the country and they realize in his demise, the removal of one of the bright lights of the transportation business in which he delighted, and in which he made his presence so beneficially felt and for the best interests of all concerned.

At a well attended meeting of the Lake Lines Association held in Buffalo on Friday last by the members of the Association of Lake Lines, of which Mr. Caldwell was the first president, the following resolutions were unanimously adopted:

"The members of the Association of Lake Lines learn with deep regret of the death of their former associate and friend, Stephen D. Caldwell, and have assembled to record the following minutes to his memory:

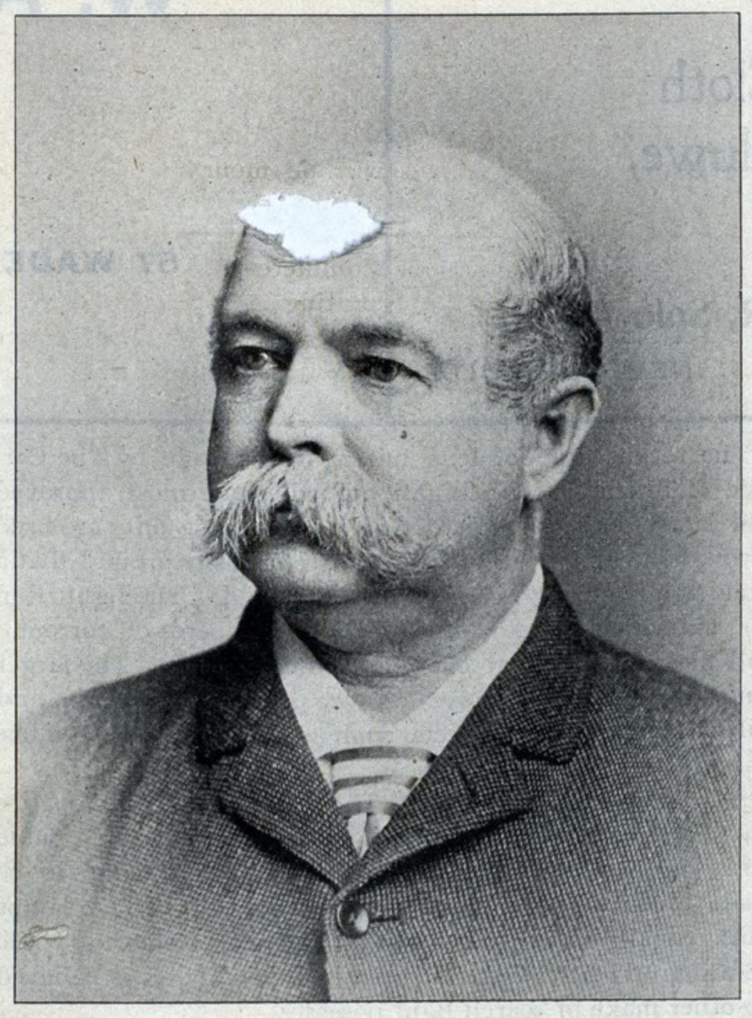
"By the death of Stephen D. Caldwell there has gone from our midst one of conspicuous ability, who, although firm in purpose, was at all times courteous, considerate and wise in counsel.

"As a token of esteem and respect in which he was always held by his associates, it is ordered that this testimonial he entered upon the minutes of the association, and a copy of the same transmitted to his family."

At the family home, No. 212 Linwood Avenue, on Saturday morning, the funeral of the late Stephen D. Caldwell was held. The Rev. J. A. Regester, pastor of St. Paul's Church, of which Mr. Caldwell was a member, officiated. The attendance of business and professional men was unusually large, as from his extended connection with various transportation lines, Mr. Caldwell had formed a most wide acquaintance among the representative citizens of Buffalo.

Honorary bearers were selected from among personal friends of the deceased as follows:

G. L. Douglas, president and general manager of the Western Transit Company; C. C. McCain, commissioner of the Association of Lake Lines; William P. Henry, manager Lehigh Valley Transportation Company; Peter P. Miller,



THE LATE STEPHEN D. CALDWELL.

Red Star Line; M. M. Drake, Superintendent Lackawanna Transportation Company; Henry C. French, president and general manager Union Transit Company; Postmaster Howard H. Baker, Arthur D. Bissell, S. V. Parsons and George H. Dunbar.

The active bearers were Theodore Vosburgh, E. L. Kimberlee, George B. Taylor, M. W. Cole, James B. Weeks, E. J. Rick, Stuart Lansing and H. T. Cutting, all present and former employes of the Western Transit Company.

Mr. Caldwell is survived by the widow and three children. Mrs. Gilbert E. Jones of New York, Mrs. Charles Chamberlain, of Chicago, and Mrs. George Edgar Montgomery, of New York.

THE Baltimore & Ohio has just completed a plant at Sandusky City from designs by engineer maintenance of way David Lee, for transferring coal from the car to vessels. It is of the drop-bucket type and is one of the most complete plants in the state for this purpose. The capacity is 400 tons per hour from cars into vessels, and this is one with a very small percentage of breakage, which overcomes the principal objections to some other loading machines. The docks are dredged to a depth of twenty feet and afford dock room for four large vessels.

METEOROLOGICAL CHART OF THE LAKES.

(Weather Bureau data for June.)

FOG.

One hundred and eighty observers, covering the whole chain of lakes, reported upon the occurrence of fog during the thirty days ending May 15, 1898.

The periods of greatest fog were as follows: Lake Superior, April 22, 23, and May 1, 2 and 10; Lake Michigan, April 22, and May 1 and 2; Lake Huron, April 22, and May 2 and 10; Lake Erie, April 22, and May 2 and 10; Lake Ontario, May 3.

It is seen from the foregoing that fog was general throughout the lake region on April 22, May 1, 2 and 10, and that the atmospheric conditions under which it formed apparently drifted toward the eastward. Some of the details for the dates above named follow:

April 22.—Lake Superior: Light fog during the day about Keweenaw Point and Deer Park. Lake Michigan: Heavy fog in the extreme southern portion and along the northwest shore from Milwaukee to the Straits. Lake Huron: Light fog on the 21st from Saginaw Bay to off Thunder Bay Island, 2 to 9 a.m.; elsewhere heavy fog with rain from early morning of the 21st until the evening of the 23d, lifting occasionally and becoming lighter; fog was very heavy morning of the 23d. Lake Erie: Fog observed from Buffalo to the Detroit river about 3 p. m., continuing at intervals to 10:30 a.m. of the 23d. Lake Ontario: 22d, heavy fog at Charlotte, light at Fort Niagara; 23d, heavy fog on east end of lake until 11 a.m., light at Fort Niagara on the west end.

May 1.—Lake Superior: Fog reported from 5:45 a. m., until late at night in all sections, except the extreme west end, continued most of the 2d, except over the western portion, where it lifted during the forenoon of the last named date. Lake Michigan: Generally heavy fogs in all sections all day of the 1st, and well into the afternoon of the 2d. Lake Huron: Heavy fog in all sections from morning of the 2d until forenoon of the 3d, the fog of the 3d, however, occurred in scattered banks and was not so heavy as on the 2d. Lake Erie: Fog from the Detroit river to Buffalo; heavy during the forenoon and lighter during the afternoon. Lake Ontario: Light fog on 3d at Charlotte, also at Sodus Point to 8:40 a.m.

May 10.—Lake Superior: Fog from Sault Ste. Marie west to Grand Marais, midnight until 10 a. m. Lake Michigan: Fog heavy on the lake and along shore during the morning of the 10th. Lake Huron: Fog began at 11 p. m. of the 9th and continued until about 3 p. m. of the 10; heavy during the early morning and at intervals during the forenoon. Lake Erie: Fog extended from the islands east to Buffalo; formed in light banks at 1 p.m.; heavy during the evening; continued until early morning of the 11th. Lake Ontario: Light fog at Charlotte and Big Sandy, in the forenoon of the 11th.

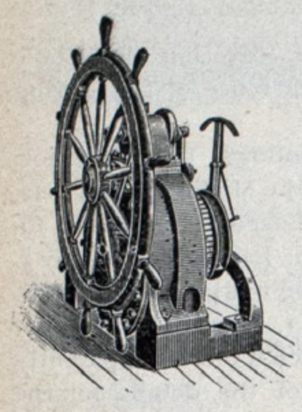
On Lake Superior the greatest percentage of fogs occurred with southeast and northwest winds; Lake Michigan with northeast and southeast winds in the morning and southeast winds in the afternoon or evening; Lake Huron with south winds in the morning and southeast in the afternoon or evening; Lake Erie with west winds in the morning and southwest and west in the afternoon and evening; Lake Ontario with north and east winds in the morning and southeast in the afternoon.

By far the greater number of storms that pass over the lake region in June come from the northwest. The storms of June are not so severe of those late of fall and winter. Neither are the outer signs of their approach precisely the same. The dangerous winds of summer are the squall winds which accompany thunderstorms. They last but a short time, and their coming can almost always be foretold by the appearance of the western sky. The barometer is unsteady, rising and falling quite abruptly. The day is generally close and oppressive and the clouds present a broken and heaped up appearance.

Navigators on the Great Lakes are advised of the approach and force of storms by a system of signals. In addition to the display of signal flags, a telegram is sent daily to each displayman during the season of navigation, advising him as to weather conditions, and in the case of threatening weather, of the location and expected movement of the storm center. The information thus obtained, in connection with the outward signs of falling weather known to every experienced navigator, will, in general, be amply sufficient to safeguard floating property.

The important subject of "The Carrving Trade of the Great Lakes" is dealt with in the June number of the "North American Review" by Allan Hendricks, who directs attention to the remarkable growth of our inland waterway traffic, its commercial value to the country at large, and discusses the means whereby its further development could be best stimulated.

QUEEN CITY HYDRAULIC STEERER



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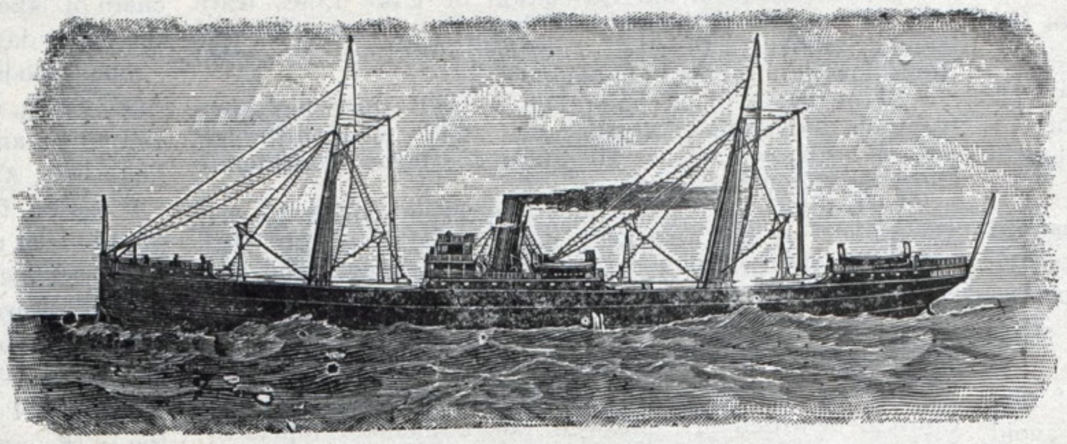

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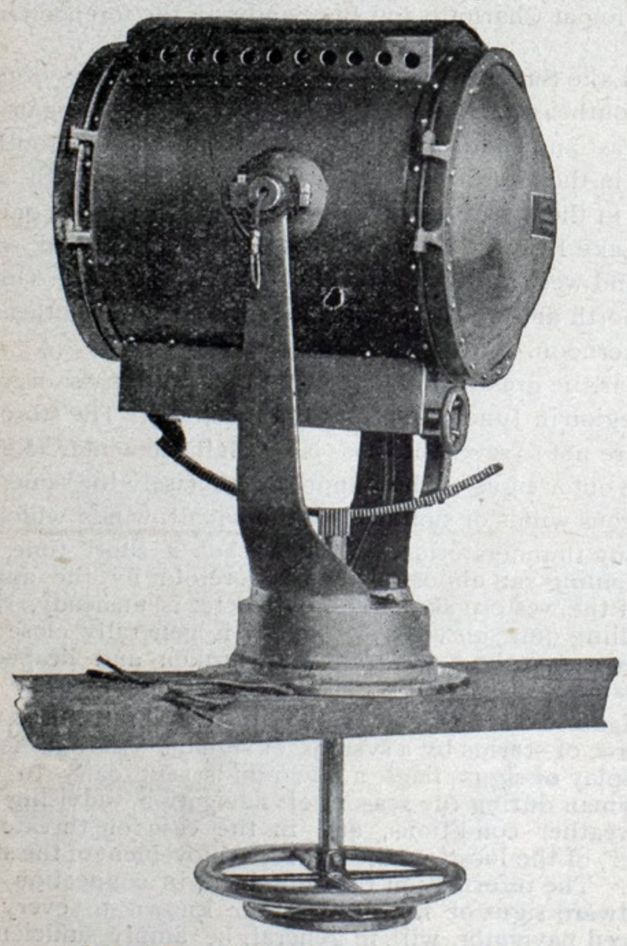
ELECTRIC SEARCH LIGHTS.

(ILLUSTRATED).

The ever increasing demands for safety, as well as the additional facilities for making landings and handling freight require that all vessels equipped with an electric light plant should have a search light, and one that can be relied upon under the most severe conditions.

For "picking up" buoys, making landings, distinguishing



Latest Type Lens Mirror Lamp. (Cut 1).

distant objects, etc., search lights are found invaluable. Their simplicity and ease of manipulation and certainty of operation renders them reliable.

For unloading vessels the light may be spread so it illuminates a large area. This is found to be a great convenience by river steamers, especially where a large number of landings are to be made during the night.

The recent type of lens mirror lamps made by The Carlisle & Finch Co., Cincinnati, embodies the most approved and latest designs. Mirrors of a high-grade only are used throughout and the curvature is so carefully ground that a wonderfully strong ray of light is obtained. The light from the nine inch lamp (taking only five amperes of current), will pick up buoys at over half-mile distance. The larger lamps will pick up buoys at over one mile with ease, and will illuminate large objects, such as sails, etc., at two miles or more.

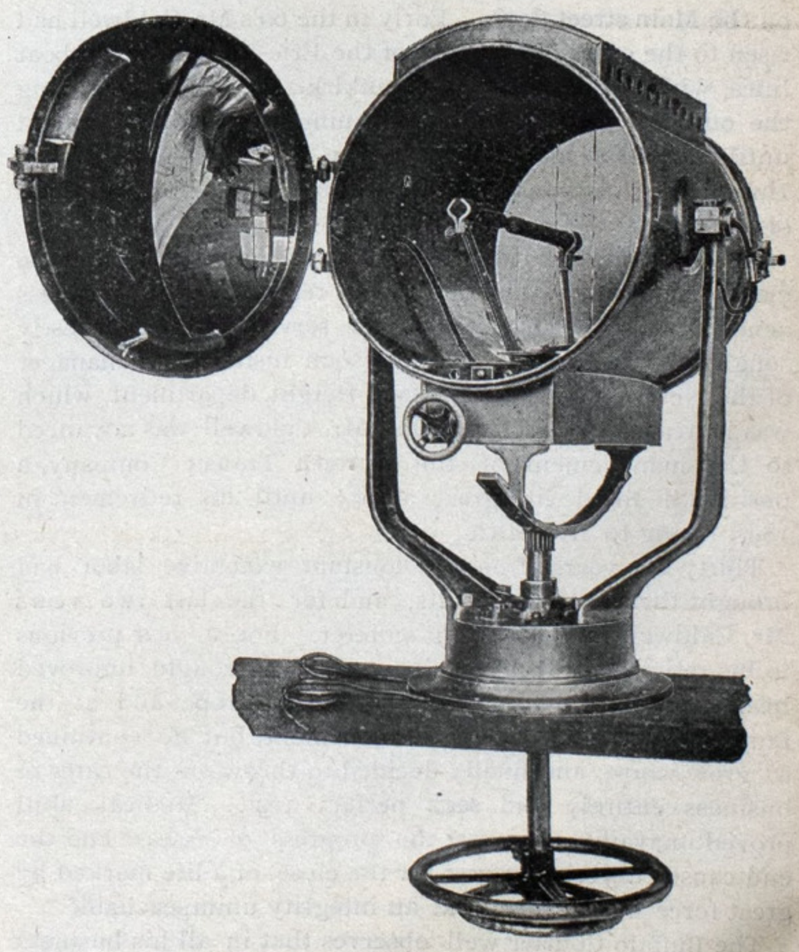
All lamps are fitted with The Carlisle & Finch Co.'s improved mechanism. The lens mirror lamps have a double screw mechanism which enables the body of a lamp to be made much shorter and lighter than usual. The lamps work equally well in any position and may be started while pointing up vertically. This is a feature which it is believed no other make of search light posesses.

The first illustration shows a lens mirror lamp with pilot house steering gear attachment. Attention may be called to the simplicity of this arrangement. The outer and larger hand wheel turns the lamp in the horizontal direction and the smaller wheel, attached to the inner spindle elevates or depresses the lamp by means of the small gear and segment. This is the simplest and most reliable form of steering gear that has heretofore been applied to a marine projector.

The second illustration represents this same lamp with the rear door open, to allow inspection of the lamp, etc. It will be noticed that the door containing the lens does not fall down and hang from the case. Instead of dropping the door, it is simply swung to one side. There is thus no danger of injuring the expensive lens by dropping it against the base of the lamp. It is not necessary to open the back of the lamp when it is desired to place new carbons in the lamp, and all trimming may be done from the front.

Another notable improvement in these lamps is the manner in which the cylinder or case is constructed. The ends of the case are heavy brass castings, highly polished. The hinges are cast solid with these rings and are always secure and cannot work loose. The doors are also brass castings, polished and highly finished. This admirable construction insures a very strong and rigid case, the mechanism is always supported in line with the mirror, and the latter is held securely and is free from all danger of accidental breakage.

The Carlisle & Finch Co. have recently brought out their nine inch lamp, mention of which we have made before, which is particularly adapted to launches and yachts. A number of these small lights have been placed on naphtha launches this season and a great many on steam yachts.



Latest Type Lens Mirror Lamp. (Cut 2).

This lamp weighs complete but thirty pounds and is but nineteen inches high over all. It is very handsomely finished and is in keeping with the bright fittings of any fine yacht.

This company have furnished a great many lamps for Yukon river boats and claim to have furnished more lights on that river than all the other search light makers combined."

F. W. WHEELER & CO. FINANCIALLY EMBARRASSED.

A dispatch from Bay City says: F. W. Wheeler & Co., the shipbuilding company, is in financial difficulty over completion of contracts made with the Bessemer Steamship Co., of Cleveland, for constructing a steel steamer and two steel barges. Advances in price of steel have caused an additional cost of $20,000 in building these ships, besides a strike and advance in cost of labor. The company became embarrassed and the agent of the Bessemer company has taken possession of the Wheeler plant under the terms of the contract, and will finish the vessels. The Wheeler company has executed a chattel mortgage for $20,000 to secure various local obligations and has appointed H. P. Wickes, of Saginaw, trustee of its business. The Bessemer company will take care of paying the employes of the yard, which is temporarily shut down.

An agreement or contract between the Bessemer Steamship Co. and the F. W. Wheeler Co. for the completion of the three ships now under construction, together with the use of the yard, has been made effective. It is understood from reliable sources that the embarrassment will be only temporary. The three boats—a steamer and two consorts—which will be the largest on the lakes when they are launched, are nearly completed and the use of the shipyard will only be required for a few weeks by the Bessemer company. The manager of the Bessemer Steamship Co. yesterday stated that his company had no idea whatever of becoming the owners or operators of the shipbuilding plant. The only object of taking charge of the shipyard was to have the vessels completed. According to the contracts which were closed last fall the boats should have been in commision now.

Harry T. Wickes, of the firm of Wickes Bros., machinists and boiler makers, stated that there was no truth in the report that F. W. Wheeler & Co., the Bay City shipbuilders, had made an assignment to himself or his brother, Wm. Wickes, who is now in New York City.

It is true that Wheeler & Co. are financially embarrassed, and that Manager Bowers, agent for the Bessemer Steamship Co., of Cleveland, is completing Wheeler & Co.'s contracts for big boats, including two barges for John D. Rockefeller.

VISIBLE SUPPLY OF GRAIN

As compiled for The Marine Record, by George F. Stone, Secretary Chicago Board of Trade.

Cities Where Stored.	Wheat. Bushels.	Corn. Bushels.	Oats. Bushels.	Rye. Bushels.	Barley Bushels.
Buffalo	2,151,000	1,028,000	1,325,000	149,000	89,000
Chicago	1,899,000	6,875,000	789,000	399,000	38,000
Detroit	53,000	138,000	12,000	21,000	.....
Duluth and Superior	3,884,000	2,344,000	990,000	127,000	51,000
Milwaukee	127,000	.....	5,000	13,000	27,000
Montreal	297,000	202,000	999,000	16,000	33,000
Oswego	.....	34,000	7,000	.....	4,000
Toledo	450,000	512,000	232,000	30,000	.....
Toronto	21,000	.....	2,000	.....	1,000
On Canal	25,000	413,000	201,000	.....	60,000
Grand Total	23,672,000	20,115,000	7,197,000	1,420,000	563,000
Corresponding Date, 1897	26,897,000	12,494,000	8,970,000	2,668,000	1,414,000
Increase	587,000	611,000	.....	.....	77,000
Decrease	.....	.....	917,000	28,000	.....

While the stock of grain at lake ports only is here given, the total shows the figures for the entire country except the Pacific Slope.

NOTES.

Frederic Remington, in the last Harper's Weekly, says: "'Jackie,' the prevailing thing on a man-of-war, I fail to comprehend fully. He is a strong-visaged, unlicked cub, who grumbles and bawls and fights. He is simple, handy, humorous, and kind to strangers, as I can testify. The nearest he ever comes to a martial appearance is when he lines up at quarters to answer 'Here!' to his name, and there is just where he doesn't martialize at all. He comes barefooted, hat on fifty ways, trousers rolled up or down, and everything blowing wide. He scratches his head or stands on one foot in a ragged line, which grins at the spectators in cheerful heedlessness, and he looks very much gratified when it is all over. He is for a bang-up sea fight, or two roaring days of shore liberty, where he can 'tear up the peach' with all the force of his reckless muscularity."

A reporter had a very interesting interview recently with Mrs. Callie L. French, the lady who enjoys the distinction of being the only woman holding a pilot's and captain's license in the United States, and who is actually engaged in running a boat. The Cincinnati Enquirer and the New York Journal in the three months have used column after column in publishing her history and that of her distinguished husband, Capt. A. B. French. Mrs. French is 35 years old and a very handsome and pleasant lady. She takes pleasure in being agreeable, and is always willing to show you around over their magnificent floating palace. She belongs to the American Association of Masters and Pilots, and is universally respected by all rivermen. There is not a craft afloat that does not pull the whistle in her honor whenever or wherever her boats are sighted. Capt. French, her husband, who is also a master and pilot, was the first to attempt the show business on the water. This was 25 years ago, in a little boat plying up and down the Ohio river, and as a result they to-day have two handsomely equipped floating theaters with a national reputation, and are anxiously watched for from the junction of the Allegheny and Monongehela rivers to the Gulf of Mexico.—The Waterways Journal, St. Louis.

Since the beginning of the war Congress has authorized the construction of 3 new battleships, 12 torpedo boats and 16 torpedo-boat destroyers. The design of the battleships will be nearly identical with the Alabama class, with the addition of two submerged torpedo tubes. The torpedo boats will be from 150 to 170 tons in size, have a minimum speed of 26 knots, a coaling capacity of 40 tons and steaming radius of 1200 miles. The battery of each will consist of three 3-pounder rapid-fire guns and three torpedo tubes. They are to be completed within one year and not to exceed $170,000 in cost, each. The displacement of the destroyers will be 400 to 435 tons, the coaling capacity 100 tons, the steaming radius 2,000 miles, and speed 28 knots. The battery will include two 3-in. rapid-fire guns, five 6-pounders and two torpedo tubes. They are to be completed within 18 months at a cost not to exceed $300,000 each. Bids for the torpedo boats and destroyers have already been asked for by the Navy Department. The five new dry docks for the navy ordered by Congress are now being planned by the bureau of yards and docks.

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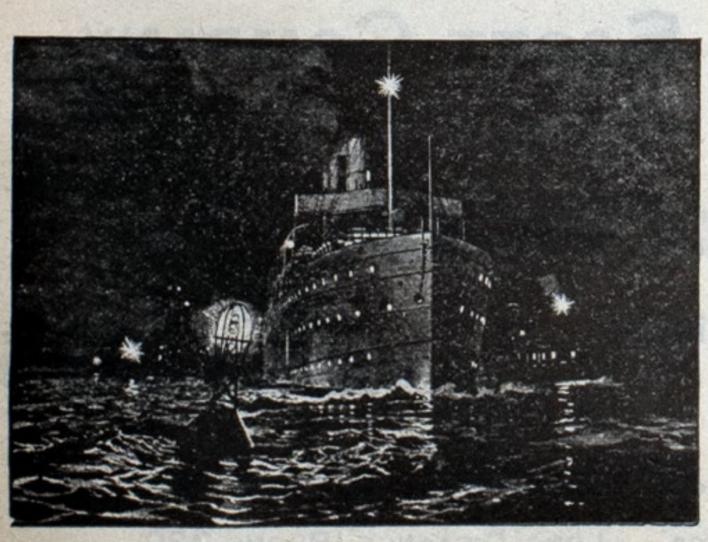

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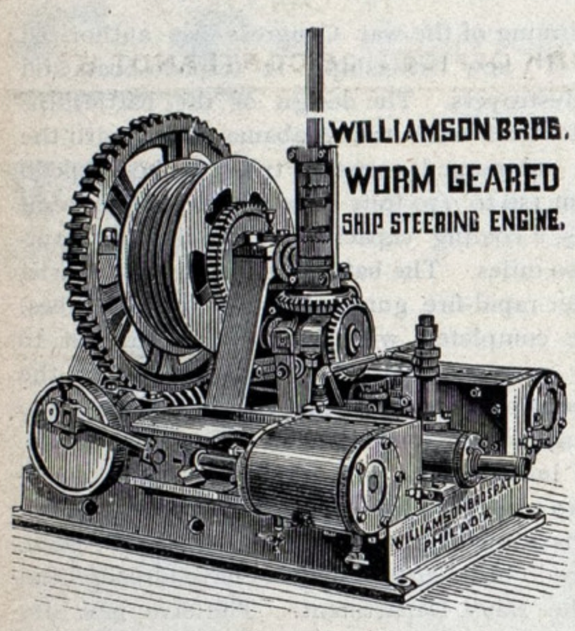

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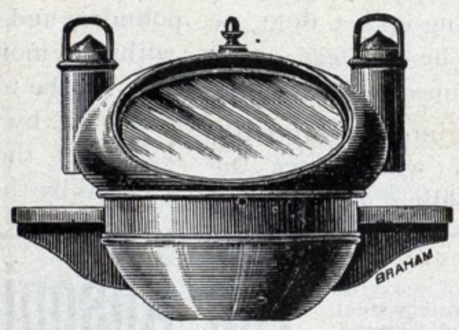
THE MARINE RECORD PUB. CO. Cleveland, O.



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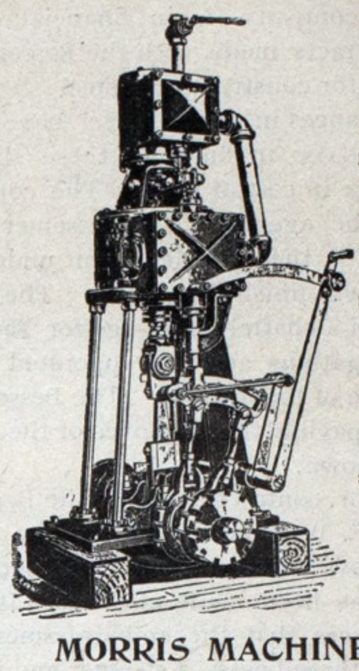

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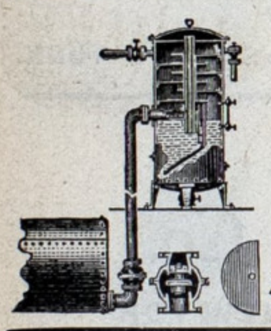

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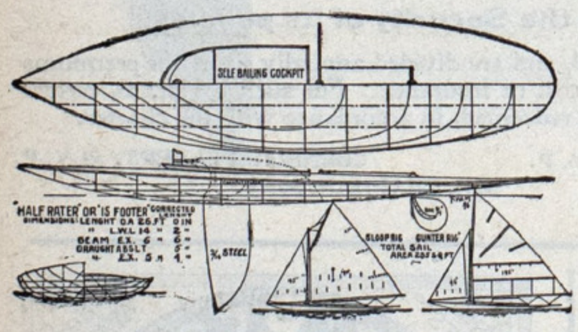
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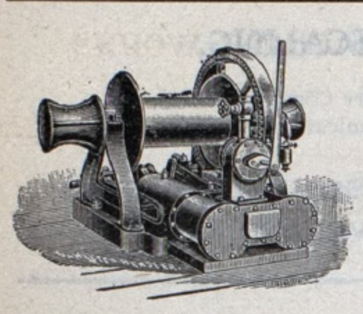

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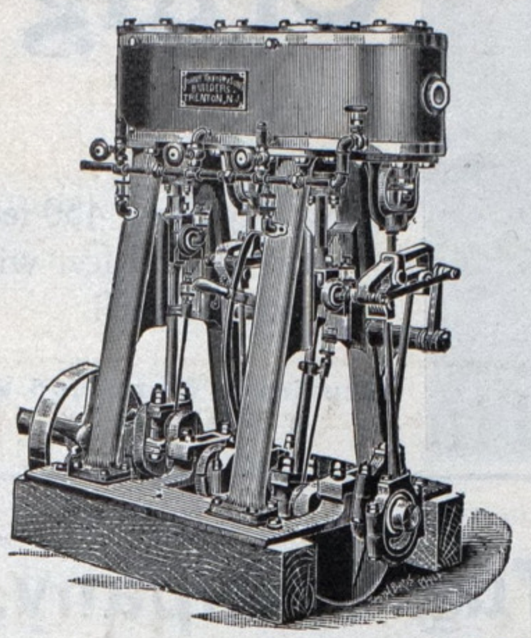

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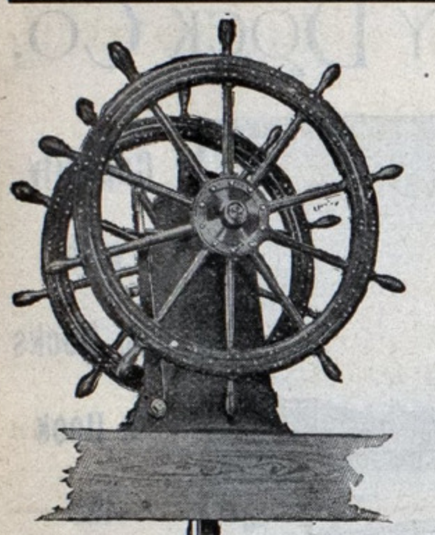

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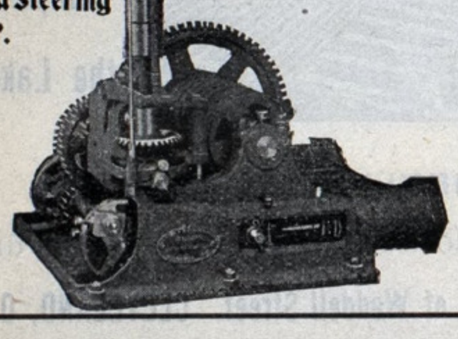

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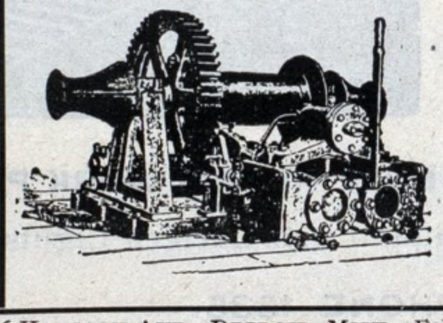

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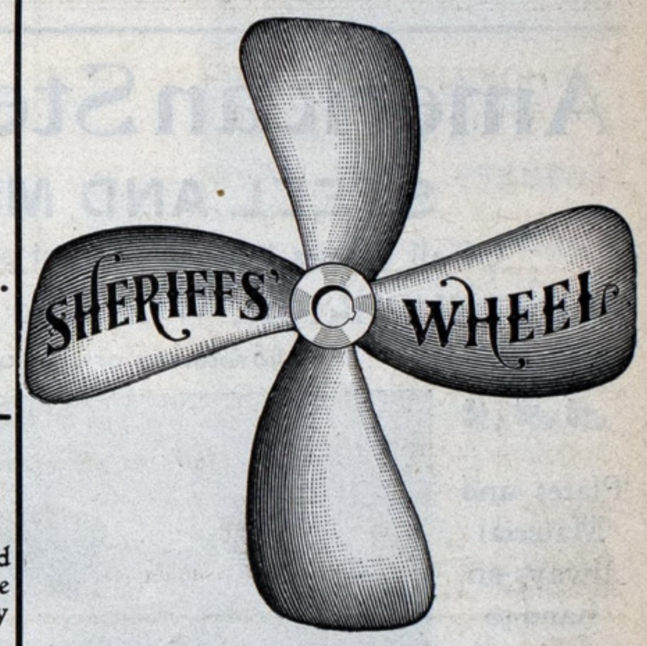

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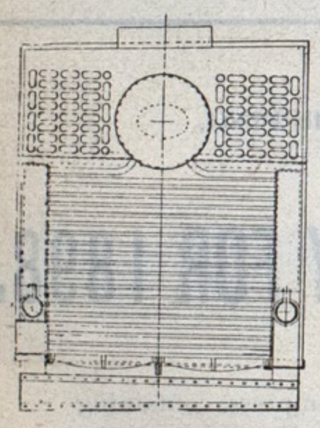

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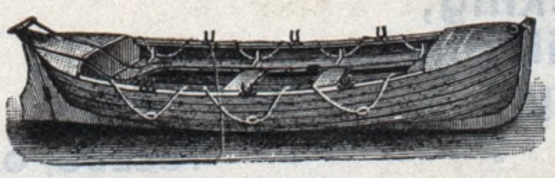

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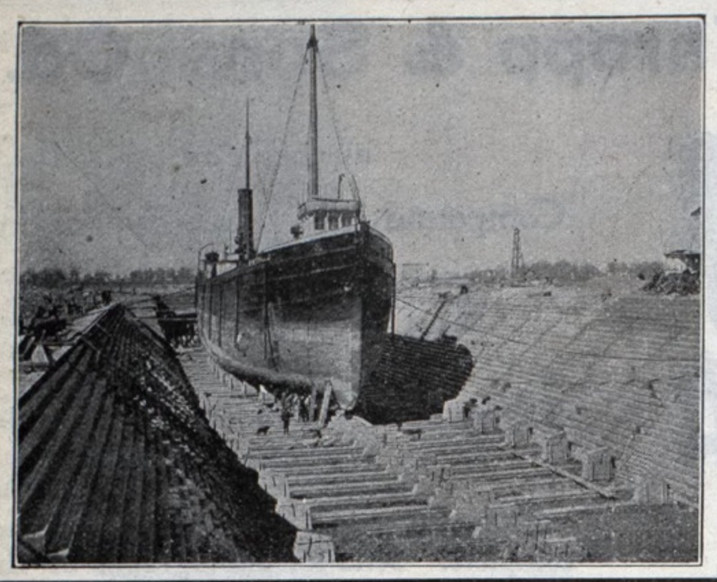

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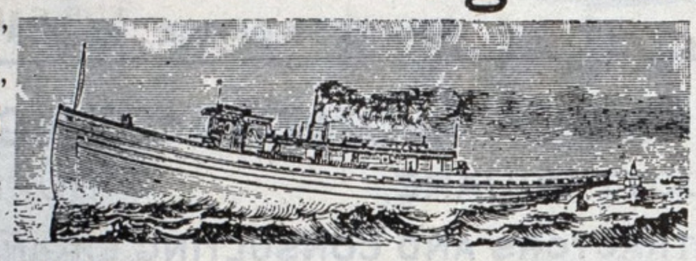

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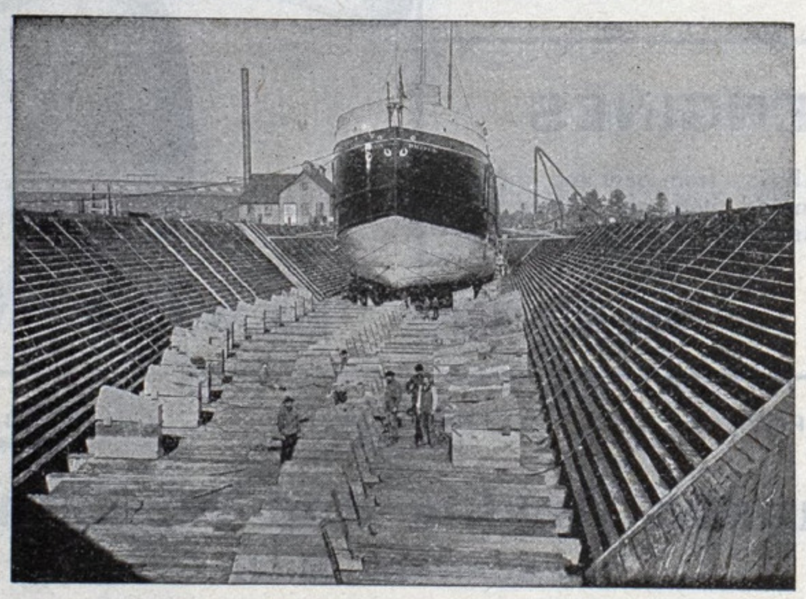

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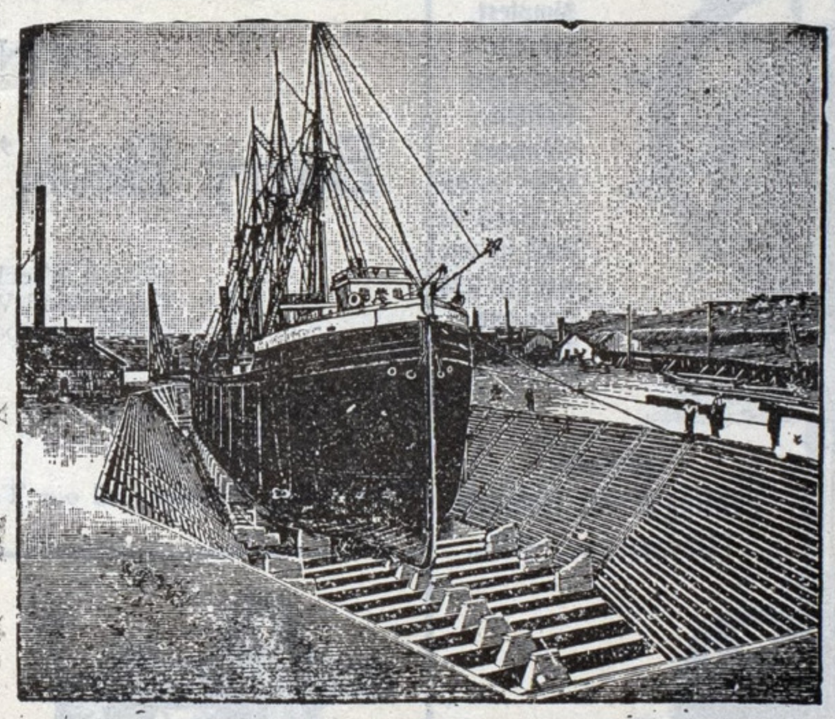

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